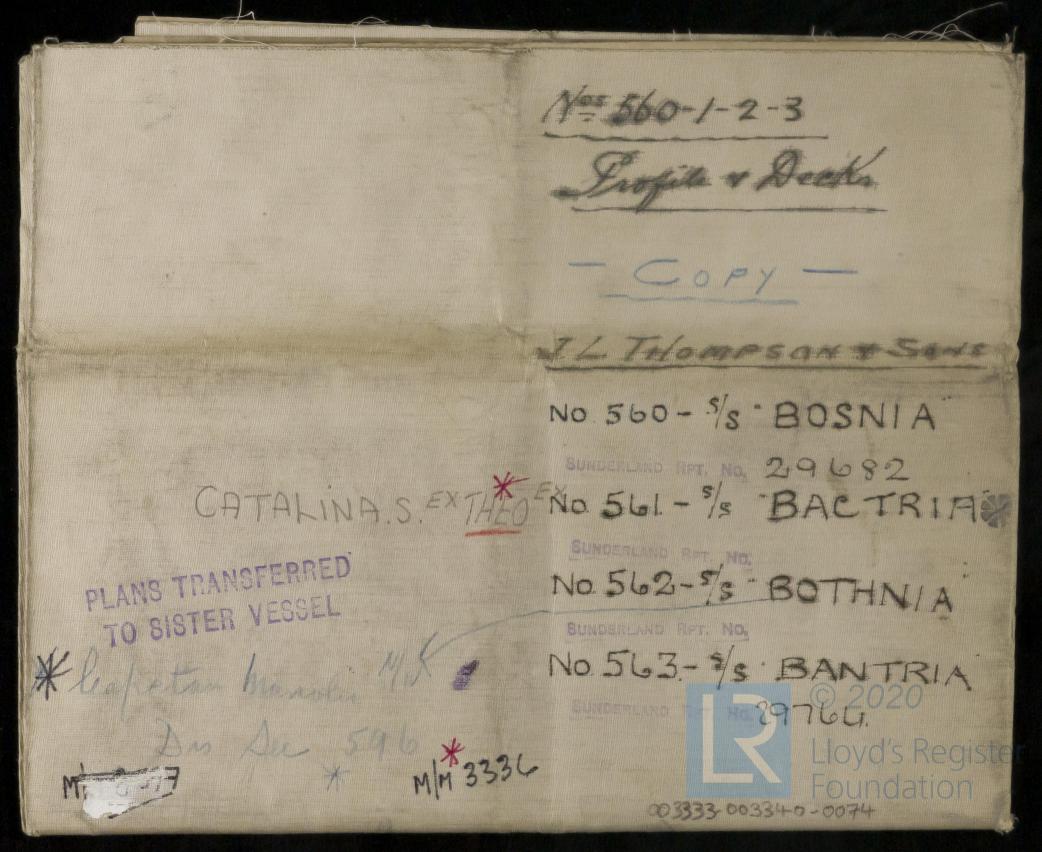
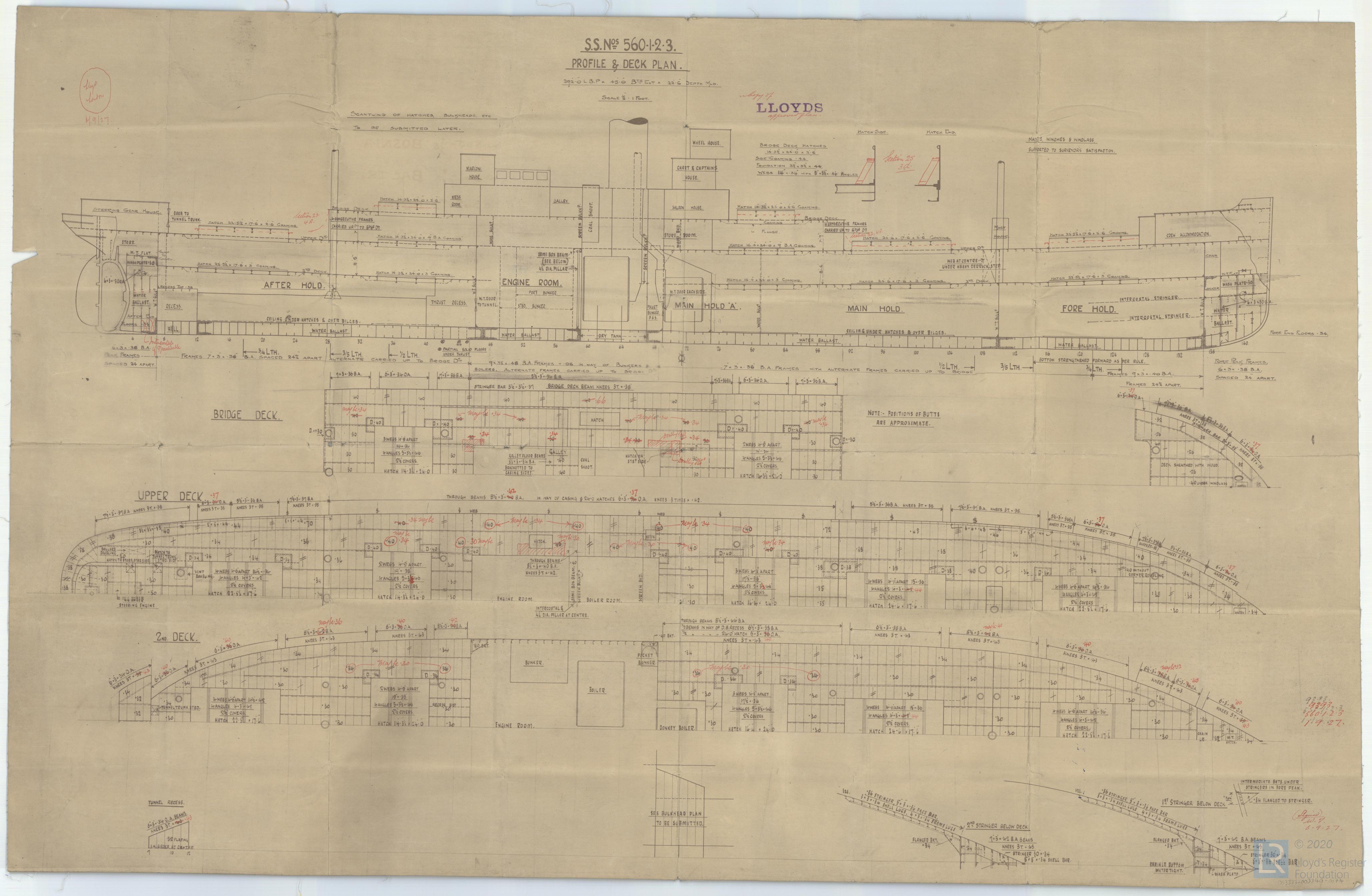
BOTHNIA





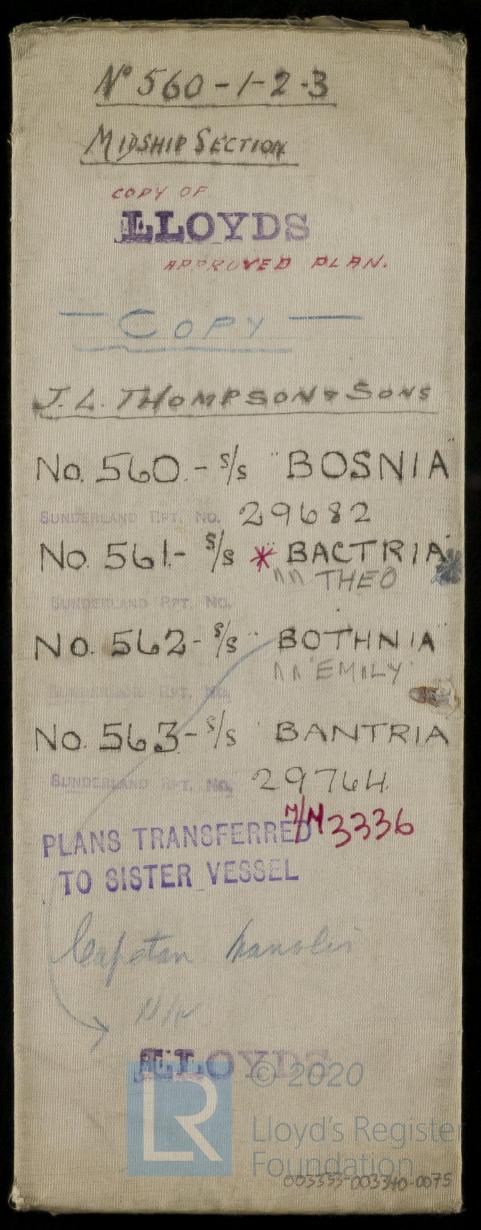
SUNDERLAND. JOS. L. THOMPSON & SONS, WD. S. S. No. 562 S.S. BOTHNIA PROFILE & DECKS. (AS BUILT).

SUNDERLAND RAT. No. 29435



008597-008607-0032

Foundation



- MIDSHIP SECTION. NUMERALS. PRINCIPAL DIMENSIONS. 5.5.Nº5560.1.2.3. D. 22.5 d.11.12 Lioyals LENGTH B.P. D=L = (22.5 x 292) = 6570. Blamps BREADTH EXTREME 45.0. LLOYDS 100 A.I.CLASS. (B+D) *L · (4475+225) *292 : 19637. 44.9. MOULDED. ERECTIONS . 55% OF L scale 1/2 - 1 Foot. DEPTH MLD UPPER DK. 22.6. LLOYDS DEPTHS TO LENGTH (UPPER DK.): 12.98. EQUIPMENT NUMERALS. " " (BRIDGE "): 9.65. (B+0)xL : 19637. Corrected to Lloyds. BRIDGE 128-62 x 7.75 x .75 1 748. 187. BRIDGE STRINGER HO . 4- OTREBLE RIV. OVERLAPS SEE DECK PLAN FORECASTLE 32.33 . 7.75 . 75 , 268. CASING ETC 1/45 × 9.5 × 5 29 x 32 SINGLE " BRIDGE DECK PLATING (40) 30 WITHIN LINE OF DECK OPENINGS, DOUBLE RIV. OVERLAPS. EQUIPMENT Nº 20840. 26, SINGLE RIV OVERLAPS. SHEATHED WITH WOOD. BRIDGE DECK STRINGER BAR 34-34-37. 54.3 · 34. B.A. BRIDGE DECK 440 6-34-40 bug. BULWARK 26 6834 BULB, OR 54 34 34 B.A. -6.3 -50 RUNNER BAR 3.3.30 57183 12 BEAMS AS PER PROPILE & DECK PLAN! BRIDGE SIDE PLATING .48. AT EACH STRY THROUGH REAMS 7.3 x 36 B.A. TREBLE RIV. OVERLAPS. THROUGH BEAM KNEES 38. PILLARS ON ALTERNATE BEAMS, REELED; 2 5/8 DIA. OR 7 3/2 " 3/2" 38 CHANNEL FOLE SIDE PLATING . 37, SINGLE RN. SEAMS 5, 3/4 RIVETS. HATCH END PILLARS AS PER SEPARATE PLAN. & OVERLAPS. * BAWEB WITH BFLANGE ON FACE OVER BULKHEADS 46869. UPPER DECK PLATING 38 TO 30, HOW BRIDGE, AS PER DECK PLAN 3/4×3/4×36 SINGLE ANGLE TO DECK. S SINGLE RIY SEAMS THROUGH BEAM KNEES 35 TO 30 WITHIN LINE OF DECK OPENINGS, 30 IN BRIDGE. STERN FRAME · 9×5/2 EXCEPT FOR 4 224 "38, 5, 7/8 RIVETS. RUDDER POST WPPER DK STRINGER HB FROM WITHIN BRIDGE, : 8 - 5/2 DOUBLE RIV. OVERLAPS FOR " LIT", SINGLE AT ENDS. FRAME SPACES TO 35 " 38 AT ENDS, (40) NOER ERECTIONS. PLATING INCREASED IN WAY OF WIDE CASING, AND S AT ENDS OF RUDDER - GANTARELLINE JOHN INCREASED 50% AT BRIDGE ENDS. (SEE DECK AVAN) 24.0 HATCHES, AS PER DECK PLAN. BRIDGE . -TREBLE RIV. OVERLAPS FOR " LATH. PLAN OF RUDDER TO BE SUBMITTED. 6+312×40649. DOUBLE AT ENDS, AND IN BRIDGE. STRINGER BAR 34 34 36 TO 34 UNDER ERECTIONS UPPER DECK 446 - W6 = 35 = 40 LUG. 6.6" 48 IN WELLS 70 12 LTH INNER STRINGER BAR UNDER ERECTIONS 3:34 34 16:3.50 V-184/7 RUNNER BAR. A BEAMS AS PER PAOFILE & DECK PLAN. SHEERSTRAKE . 67 TO . 40, . 49 IN WAY OF BRIDGE, THROUGH BEAM KYEES THROUGH BEAMS CLEAR OF BRIDGE The 3 - 37 B.A. KNEES 22/2 - 38, 5, 18 RIVS. INCREASED 50% AT BRIDGE ENDS. TREBLE IN WAY OF BRIDGE '42 PILLARS ON ALTERNATE BEAMS, REELEO: . " IN WAY . . 812 x 3 x 40 . . 2512 x 42, 6. 18 RIVS. RIV. OVERLAPS, QUADRUPLE WHERE PLATING OVER 60. 6, 18 RIVETS: CLEAR OF BRIDGE 234DIA. OR 7:32-32-40 CHANNEL. DOUBLE AT ENDS WHERE 42 AND UNDER. IN WAY " " 3 8 DIA. OR 8 "3 4 3 4 3 4 4 4 STRAKE BELOW SHEER STRAKE . 58 TO . 40, '49 IN WAY OF BRIDGE, TREBLE RIV. OVERLAPS. DOUBLE AT ENDS 2 NO DECK STRINGER 34. 24 DECK PLATING 30 INCREASED IN WAY OF WHERE PLATING 42 AND UNDER. 240 HATCHES, AS PER DECK PLAN, TO (34) May 46.30. DOUBLE RIV. OVERLAPS. STRINGER BAR 34 34 36 TO 34. DOUBLE RIV. OVERLAPS FOR 'A LTH, SINGLE AT ENDS. INNER STRINGER BAR 3 . 3 . 34. 104-16-3/2×406UG. 2 NO DECK 44.9 SIDE SHELL . 4910 . 40 TREBLE RIV. OVERLAPS 6-3- SORUNNER BAR. 2 BEAMS AS PER PROFILE & DECK PLAN. DOUBLE AT ENDS, WHERE '42 AND UNDER PILLARS ON ALTERNATE BEAMS, REELEO. THROUGH BERNIS 8'2"3" 44 8.A. & AS PER DECK PLAN. THROUGH BEAM KNEES 43. CLEAR OF BRIDGE !-6. BRIVETS. 120 . 3 8 DIA. OR 7 . 3 2 . 44 DOUBLE CHANNELS. 140 .44 " - " " " 46 " 160 4/2 48 IN WAY OF TUNNEL 5.0, 8 -3/2 -3/2 - 44 SINGLE CHANNEL. MAIN FRAMES 7×3×368A. 242APART. IN WAY OF BRIDGE :-TO UPPER & BRIDGE DECKS ALTERNATELY. 12:0 "42019. OR 7 34 "34" 48 DOUBLE CHANNELS. 4 CONSECUTIVE FRAMES AT BRIDGE ENDS TO BE CARRIED UP. IN WAY OF TUNNEL 8-32+34+50 SINGLE " 9.34 48 B.A. IN ENG. SPACE + OF IN WAY OF BOILERS & BUNKERS. HATCH END PILLARS, AS PER SEPARATE PLAN. 9.3 . 40 B.A. FRAMES FOR 182 TO 134 FRAMES PEAK FRAMES 6x3x38 B.A. 24 APART. TRNK TOP CENTRE STRAKE 46 x 42 TO 36, 828.5. DOUBLE RIVETED OVERLAPS. THAK TOP PLATING 36 TO 34, 42 E.S. 52 B.S. BOSS PLATING 55 MARGIN PLATE 40, SOIN B.S. DOUBLE RIV. OVERLARS DOUBLE RIV. OVERLAPS 1/2 LTH SINGLE AT ENDS. CENTRE GIRDER 36" 46 TO 38, 56 8.5. B.O.Ts. 53% . 36, 39IN ENG SPACE, 49IN B.S. " CONN 3 . 3 . 34 SINGLE . 44 B.S. G. 4 RIVS. TIX MACHINERY SPACE. FLOORS 32 WITH STIFFS AS SHEWN, 428.5. TREBLE RIVETED OVERLAPS. GUSSETS EVERY 5th FRAME, 4, 4 RIVS. EVERY 4th FOR? (SEE SKETCH.) C.GIRDER TOP BAKS 3.3 "42 TO 40 . 528.5. GIRDER 34 . 44 B.S. 349 " W MACHINERY SPACE, 6. 4 RIVS. " " BOTTOM . 3/2"3/2":48 TO:46. CEILING UNDER HATCHES, AND OVER BILGES. " " VERTICALS 3"3"-34, 448.5. 5"5"-40 TANK TOP SEAMS SINGLE RIVETED \$ 13 3 34 4 RIVS 649 3/2 3/2 4-40-- LUG 5 . 3/2 . 40 UNDER ENGINES, THRUST BLOCK & BOILER BEARERS, ZRIVETS. 3-3-34, 448,5 BOUBLE UNDER ENGINES - ADDITIONAL GIRDEN UNDER ENGINES & THRUST BLOCK, THRUST BLOCK & BOILDE BENRERS WITH DOUBLE ANGLES TO TANK TOP. 10 -3:3"-34 如水片 MANHOLES ARRANGED CLEAR 1 3/4 RIVS SOIAS APART OF GIRORR UNDER ENGINES. 3.3.34. BOTTOM SHELL 49 TO 41 TREBLE RIV. OVERLAPS, KEEL 45'2 " 6270 57 BINGE KEEL :-3 STRAKES NEXT KEEL TO HAVE MIDSHIP THICKNESS BULB, 8 - 40. MAINTAINED FORWARD TO COLLISION BULKHEAD. ANGLE, 4"4" HH FLOORS EVERY 3 PRAME, EVERY FRAME UNDER ENGINES, & FORWARD OF 3/5 LTM. FRAMES 122 TO 134 INTERNIE PATE BRACKET FLOOR. B.O.T. & QUESET CONNECTION INCHERSED 50% GUSSETS EVERY 4TH FRAME. 9 103 6:3:368.4 468.5 " GUSSET, GRIVS. 9392. \$23/4 RIVS. 5DIAS APART. (0 000, 0 00 00 2) 18×12 6-3-36BA 46B.5-GIRDER . 34 -5×5×34 *44 8.5. 6:33×44 8.A. 5+8.5

SUNDERLAND

JOS. L. THOMPSON & SONS, LD

S.S. "BOTHNIA"

MIDSHIP SECTION (AS BUILT).

SUNDERLAND RPT. No. 29435





5.5. BOTHNIA." D. 22.5 d.11.12 LENGTH B.P. = 292.0. 45.0 D=4 = (22.5x292) = 6570 BREADTH EXTREME. LLOYDS 100 A.I.CLASS. (B+0) *L. (44.75+22.5) *292 = 19637. 44.9 MOULDED. scale 1/2 . I Foot. 22.6 ERECTIONS . 55% OF L DEPTH MLD UPPER DK. : DEPTHS TO LENGTH (UPPER DK.): 12.98. EQUIPMENT NUMERALS. " " (BRIDGE "): 9.65. (B+0)×L : 19637 BRIDGE 128.62 x 7.75 x .75 . 748. BRIDGE STRINGER HO . HOTREBLE RIV. OVERLAPS. SEE DECK PLAN. FORECASTLE 28.25 - 7.75 - 75 , 164. . 29 x.32 SINGLE . . 268 CASING ETC 7/45 .7.5 x.5 SEE DECK PLAN BRIDGE DECK PLATING 34 30 WITHIN LINE OF DECK OPENINGS, DOUBLE RIV. OVERLAPS, EQUIPMENT Nº 20817 FORECASTLE " 26, SINGLE RIV OVERLAPS. SHEATHED WITH WOOD BRIDGE DECK STRINGER BAR 3/2-3/2-37. 52.3.34B.A. BRIDGE DECK 44:0 6 0 6 - 3'2 - 40 LUG. I II"CROP 3×3×30 57183 6.3. 50 RUNNER BAR BRIDGE SIDE PLATING .48. A BEAMS AS PER PROFILE & DECK PLAN. 3.6 TREBLE RIV. OVERLAPS. THROUGH BEAMS 7.3.36 B.A. THROUGH BEAM KNEES 38. - PILLARS ON ALTERNATE BEAMS, REELED; FOLE SIDE PLATING . 37 SINGLE RN. SEAMS 7 . 3 4 . 34 . 38 CHANNEL 5. 3/4 RIVETS. & OVERLAPS HATCH END PILLARS AS PER SEPARATE PLAN + 34 WEB NITH 3 FLANGE ON FACE OVER BULKHEADS 468 09 UPPER DECK PLATING 38 TO 30 AS PER DECK PLAN 3'x+3'4 - 36 SINGLE ANGLE TO DECK. THROUGH BEAM KNEES SINGLE RIV SEAMS 35 TO 30 WITHIN LINE OF DECK OPENINGS, 30 N BRIDGE . 9.52 22/2 * 38, 5, 78 RIVETS. EXCEPT FOR 4 UPPER DK STRINGER '48 FROM WITHIN BRIDGE DOUBLE RIV. OVERLAPS FOR "ALTA, SINGLE AT ENDS. 8-5% RUDDER POST FRAME SPACES TO 35 x 38 AT ENDS :34 UNDER ERECTIONS. 74-24 PLATING INCREASED IN WAY OF STEM OF AT ENOS OF INCREASED 50% AT BRIDGE ENDS. (SEE DECK PLAN) RUDDER . 634 + OWNERS 14 . 7 DIA. 24.0 HATCHES, AS PER DECK PLAN. BRIDGE. -TREBLE RIV. OVERLAPS FOR 'A LTH. PLAN OF RUDDER SUBMITTED. DOUBLE AT ENDS, AND IN BRIDGE. 10 -6.3/2 .. 40 LUG DECK JOGGLED IN WAY OF BRIDGE ONLY STRINGER BAR 31/4" 36 TO 34 UNDER ERECTIONS UPPER DECK 446 5-06-32-40 LUG 6-6-48 IN WELLS , 70 1/2 LT II CROP INNER STRINGER BAR UNDER ERECTIONS 3"34 34 J 16x3.50 ABEAMS AS PER PROFILE & DECK PLAN. RUNNER BAR SHEERSTRAKE '67TO HO, '49IN WAY OF BRIDGE, THROUGH BEAM KNEES THROUGH BEAMS CLEAR OF BRIDGE T'A . 3. 37 B.A. KNEES 22'2 . 38, 5, 8 RIVS. INCREASED 50% AT BRIDGE ENDS. TREBLE IN WAY OF BRIDGE .42 RIV. OVERLAPS, QUADRUPLE WHERE PLATING OVER 60. . " IN WAY " . 8'2 . 3 . 42 " . 25'2 . 42, 6. 1/8 RIVS. -PILLARS ON ALTERNATE BEAMS, REELEO; 6. 8 RIVETS. CLEAR OF BRIDGE = 7-32-32-40 CHANNEL. DOUBLE AT ENDS WHERE 42 AND UNDER. 8.32.32.44 IN WAY " = HATCH END PILLARS AS PER SEPARATE PLAN. STRAKE BELOW SHEER STRAKE . 58 TO 40, 49 IN WAY OF BRIDGE, TREBLE RIV. OVERLAPS. DOUBLE AT ENDS 2 DECK STRINGER 34, 200 DECK PLATING 30 WHERE PLATING 42 AND UNDER. DOUBLE RIV. OVERLAPS. STRINGER BAR 3'2 * 3'4 * 36 TO 34. DOUBLE RIV. OVERLAPS FOR 'A LIH, SINGLE AT ENDS. TINNER STRINGER BAR 3.3.34. 101 -6.3/2x:406UG 2 NO DECK 44.9 TO MEROP SIDE SHELL .49 TO .40 TREBLE RIV. OVERLAPS 6.3. SORUNNER BAR "2 BEAMS AS PER PROFILE & DECK PLAN. DOUBLE AT ENDS, WHERE '42 AND UNDER. PILLARS ON ALTERNATE BEAMS, REELEO. THROUGH BERMS 8'4 "3" HH B.A. & AS PER DECK PLAN. THROUGH BERN KNEES :43 CLEAR OF BRIDGE: 6. BRIVETS. m. 3'2 . 3'2 . . 16 DOUBLE CHANNELS 16:0 = MAIN FRAMES 7.3.36 B.A. 242 APART. IN WAY OF BRIDGE :-TO UPPER & BRIDGE DECKS ALTERNATELY. 12.0:- = 7.34.34.48 DOUBLE CHANNELS. 4 CONSECUTIVE FRAMES AT BRIDGE ENDS TO BE CARRIED UP. IN WAY OF TUNNEL' STEEL C.L. BYP .30, 6.3: 30, O.A. STIFFS. 9. 3/2 x . 48 B.A. IN ENG. SPACE + OG IN WAY OF BOILERS & BUNKERS. HATCH END PILLARS, AS PER SEPARATE PLAN. 9.3 . 40 B.A. FRAMES FOR , 122 TO 134 FRAMES. PEAK FRAMES 6.3 . 38 B.A. 24 APART. TANK TOP CENTRE STRAKE 46 x 42 TO 36, 528.5 DOUBLE RIVETED OVERLAPS. TANK TOP PLATING 36 TO 34, 42 E.S. 528.5. BOSS PLATING 55 MARGIN PLATE 40, 50 IN B.S. DOUBLE RIV. OVERLAPS. DOUBLE RIY, OVERLAPS 1/2 LTH SINGLE AT ENDS. CENTRE GIRDER 36 " 46 TO 38, 56 8.5. B.O.Ts. 53'2 * 36 . 39IN ENG SPACE, 49IN B.S. " CONN. 3-3-34 SINGLE . 44-B.S. 6. 4 RIVS. TIN MACHINERY SPACE. FLOORS 32 WITH STIFFS AS SHENN, 428.5. 36ES. TREBLE RIVETED OVERLAPS. GUSSETS EVERY 5th FRAME, 4, 14 RIVS. EVERY 4th FOR? (SEE SKETCH.) GIRDER . 34 . 44 B. S. . 36 E.S. C.GIRDER TOP BARS 3.3. 42 TO 40 . 528.5. " 3 " " IN MACHINERY SPACE, 6. 4 RIVS. _____ STIFFS ON TANK DIVISIONS 3.3.34.
CEILING UNDER HATCHES, AND OVER BILGES. " " BOTTOM " 3/2" 3/2" 48 TO:46. " " VERTICALS 3"3".34 448.5. 5"5".40 0 13.3.34, 4RIVS. TANK TOP SEAMS, SINGLE RIVETED. 609 3/2-3/2 407 - LUG 5 . 3 2 x 40 UNDER ENGINES, THRUST BLOCK & BOILER BEARERS. GRIVS IN MICHY SPACE & AT FORE END. 0 . . . 3.3.34 7 2RIVETS. 3-3-34, 448.5. AOUBLE UNDER ENGINES, JC - ADDITIONAL GIRDER UNDER ENGINES & THRUST BLOCK THRUST BLOCK & BOILGE BEARERS WITH DOUBLE ANGLES TO TANK TOP. 3.3.34 MANHOLES ARRANGED CLEAR A 3/4 RIVS. SOIRS APART OF GIRDER UNDER ENGINES. 3-3-42 NEEL 45'2 x 62 TO .57. BOTTOM SHELL 49 TO 41 TREBLE RIV. OVERLAPS BILGE KEEL! 3STRAKES NEXT KEEL TO HAVE MIDSHIP THICKNESS BULB, 8" 40 ANGLE, 4.4" H MAINTAINED FORWARD TO COLLISION BULKHEAD. FLOORS EVERY 3 PRANIE, EVERY FRAME UNDER ENGINES, & FORWARD OF 3/5 LTM. FRAMES 122 TO 134 B.O.T. & GUSSET CONNECTION INCREASED 50% INTERMEDIATE BRACKET FLOOR. GUSSETS EVERY HTH FRAME. E - - 21 6.3.368.7 468.5 - GUSSET, GRIVS. TALENS SOIRS APART. 6+3 x 36 8.A 468.5. 7 -GIRDER .34 -5×5×34 44 8.5. 9RIVS. 6x3/2x.44 8.A. 548.5 5.3.34

MIDSHIP SECTION.

NUMERALS.

008597-008607-0029

PRINCIPAL DIMENSIONS.

Sunderland, J. L. Thompson & Som Nos 560-1-2-3. Sumping An angement. Nº 560-5.5. BOSNIA. SUNDERLAND RPT. No. 29682 Nº561-5.58 YBFICTRIA 1.562-S.S. BOTHNIA. Nº 563-55. BANTRIA SUNDED/ 11 PPT. NO. 29764 COPY -PLANS TRANSFERRED TO SISTER VESSEL Capetan manoles M/M 8 597 008597-008607-9939510 Foundation

CELLULAR DOUBLE BOTTOM, FITTED RIGHT FORE 8 AFT ALL SUCTION PIPES IN TANKS TO BE OF CASTIRON, WITH FLANGED TOINTS SECURITY FASTENED. DIVIDED SECTIONALLY FOR WATER BALLAST, HAVING ALL THE NECESSARY PIPING & AND TO HAVE CASTIRON ROSEBOXES AT THE END OF THE PIPES VALVES SO ARRANGED THAT EACH COMPARTMENT MAY BE PUMPED OUT & FILLED INDEPENDENTLY S.S. Nº 560-1-283. AIR PIPES TO HAVE GOOSE NECK TOPS & SounDING PIPES TO HAVE BRASS DECK FIELDS NEGTEX FITTED INTO DECK, & CASED IN WITH WOOD IN THE HOLDS. SEALE = 18.1FT. 292 OLBP . 45' Q' BTH EXT . 22' 6 DTH MLD. FORE & AFTER PEAKS ARRANGED TO CARRY WATER BALAST DIRECT DONKEY SUCTION
TO LLOYDS REQUIREMENTS TO HAVE THE NECESSARY AIR & SOUNDING PIVES, & TO BE PUMPED 24" DIAM. SUCTION PIPE DIAM SUCTION A ROTARY HAND PUMP TO BE FITTED TO CHAIN LOCKER ROTARY HAND PUMP ON FOLE END. MAIN BILGE LINE NOT TO BE CHAIN LOCKER. WATERTIGHT BELOW 1 DK. LESS THAN 3% BORE. - VALVE WITH ROD TO DECK 22" DIMM SUCTION PIPE FORE PEAK SUCTION (31" DIAM. SUCTION PIPE 22 DIAM. 22 PEAK FLAT BRAIN TO CHAIN LR. P. 2 5. BILGE & BALLAST LINES TO BE SEPARATE & DISTINCT AS PER SECTION 34 CLAUSE 6 C. FORE PEAK THE NUMBER & CAPACITY OF THE POWER DRIVEN PUMPS CONNECTED TO THE MAIN BILGE LINE -24 DIAM. SUCTION PIPE. IN ENGINE & BOILER ROOMS. TO BE IN ACCORDANCE WITH SECTION 4 OF THE RULES FOR ENGINES AND BOILERS. FORE HOLD. 51' 0%" DOUBLING PLATES OR THEIR EQUIVALENT TO BE FITTED UNDER ALL SOUNDING PIPES. MAIN HOLD 83-8% AFTER HOLD. 69"5" RECESS FRONT TO ER BULKHD -SHORT SOUNDING PIPES IN MACHINERY SPACE TO BE PITTED WITH NON DETACHABLE SCREW MAIN TANK. 84'92" FORE TANK 51-0% CAPS AS PER SECTION 34. CLAUSE 11. BRANCH BILGE SUCTIONS IN THE MACHINERY SPACE TO BE LED THE REMAINING REQUIREMENTS OF SECTION 34 FROM MUD BOXES FITTED WITH STRAIGHT TAIL PIPES AS PER SECTION 34. CLAUSE 6 G. OF THE RULES (1924-28) TUBE ROMPLIED WITH. 06021-2-3

560-1-2.3. Rister Plan. Copy of LLOYDS approved plan. J. L. Thompron & Sons, NO. 560.- 3/s "BOSNIA" NO.561- BACTRIA NO.562-"BOTHNIA NO.563.- BANTRIA No. 29764. PLANS TRANSFERRED TO SISTER VESSEL Capetan NIN manulus & M)M85970 Lloyd's Registe 008597-008607-0031



2-11-27.

S. S. Nº5 560-1-2-3.

LLOYDS

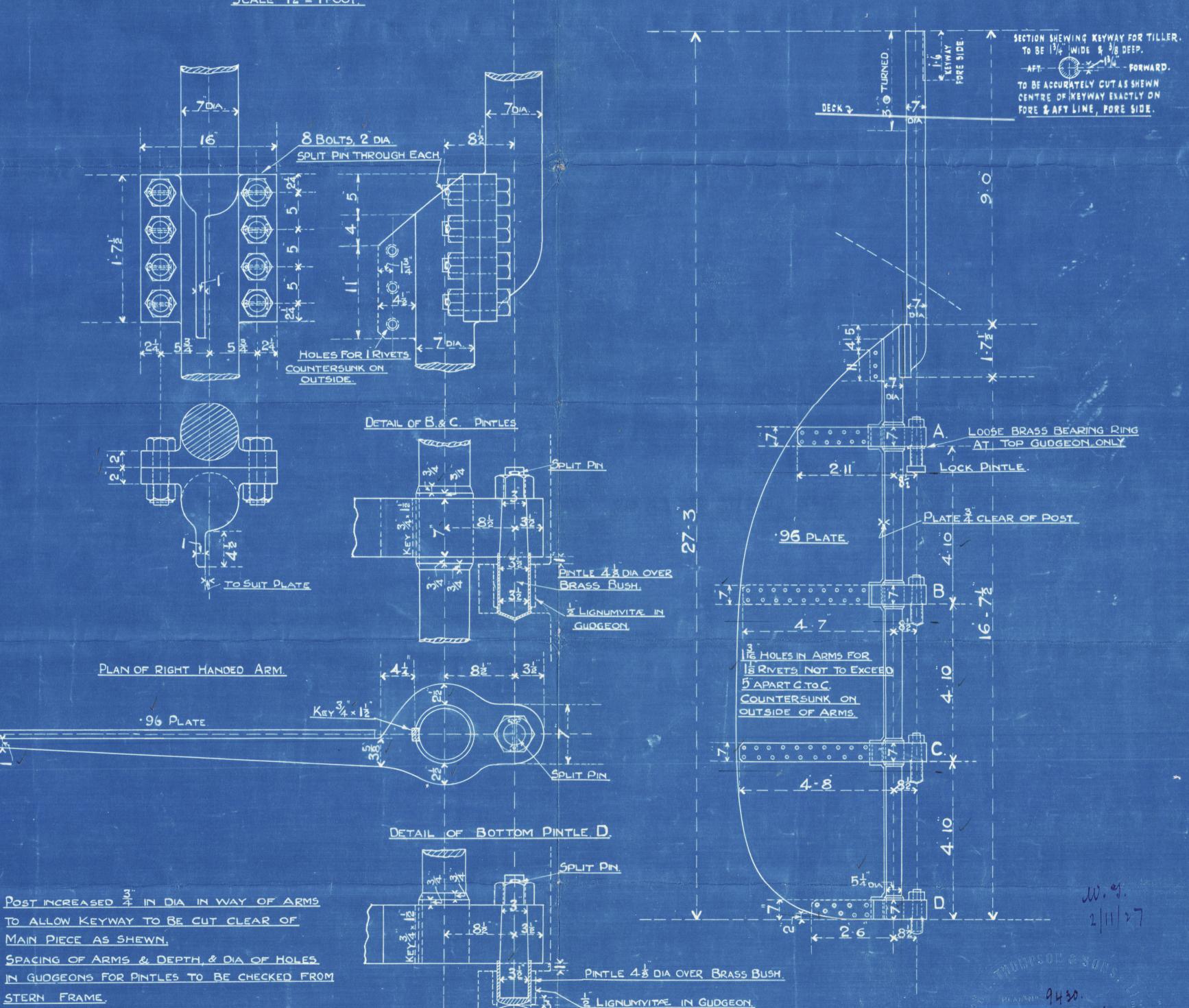
A. 74 x D. 2.71 = 200.5 = 63 RULE DIA. SPEED IL KNOTS + 4 OWNERS = 701A.

INCREASE ON FORGING ONLY.

DETAIL OF COUPLING. SCALE 12 = 1 FOOT. RUDDER: SCALE 2 = 1 FOOT.

560:1.1.3

31.10.27



3/4 BRASS

HARD STEEL DISC